IN THE CLAIMS

The following is a complete listing of the claims, and replaces all earlier versions and listings.

1. (Previously Presented) Method of processing a coded digital signal including a set of samples of different types obtained by coding a set of original samples representing physical quantities, and including a set of information representing original samples and parameters used during the coding, said method including the steps of:

determining a subset of samples corresponding to a selected part of the original digital signal using the set of information;

obtaining a number of samples of at least one predetermined type and which are contained in the determined subset of samples;

deciding whether or not to modify the determined subset of samples according to the obtained number of samples of the at least one predetermined type, before restoring the selected part of the original signal.

2. (Previously Presented) Method according to Claim 1, in which said determining, obtaining, and deciding steps are effected on reception of a request to obtain the part of the coded digital signal.

3. (Previously Presented) Method of processing a coded digital signal including a set of samples obtained by coding a set of original samples representing

physical quantities, and including a set of information relating to a size w, h of the set of original samples and its resolution res, comprising the steps of:

locating a subset of original samples of given size zulx, zuly, zh, zw and resolution zres in the set of original samples according to the set of information ~~on~~ relating to the size w, h and the resolution res of this set;

determining, amongst coefficients of a low-frequency sub-band LL_o of a last decomposition level obtained by decomposition into frequency sub-bands of the set of original samples, a number of coefficients per dimension of the signal which correspond to the located subset; and

deciding whether or not to modify the size of the located subset according to the determined number of low-frequency sub-band coefficients before restoring the located subset.

4. (Previously Presented) Method according to Claim 3, in which said decision step includes taking into account at least one predetermined criterion representing a required quality level for the restoration of the subset of original samples of the digital signal.

5. (Previously Presented) Method according to Claim 3, in which said decision step includes taking into account at least one predetermined criterion representing a compromise between a required quality level for the restoration of the subset of original samples and a speed of processing for restoring the subset of original samples.

6. (Previously Presented) Method according to Claim 3, further comprising the step of modifying the size of the located subset of original samples.

7. (Previously Presented) Method according to Claim 6, in which the modification lies in an increase in the size of the subset of original samples.

8. (Previously Presented) Method according to Claim 7, in which by representing, in a space of dimensions corresponding to the dimensions of the digital signal, a position of the coefficients of the low-frequency sub-band of the last decomposition level and a position of the subset of original samples delimited by a boundary, the increase in the size of the subset consists of moving the boundary so as to add to the subset at least one coefficient of the low-frequency sub-band per dimension of the digital signal, the at least one added coefficient being situated close to the boundary before the movement thereof.

9. (Previously Presented) Method according to Claim 6, in which the modification lies in a reduction in the size of the subset.

10. (Previously Presented) Method according to Claim 9, in which, by representing, in a space with dimensions corresponding to the dimensions of the digital signal, a position of the coefficients of the frequency sub-bands obtained by decomposition of the set of original samples and a position of the subset of original samples delimited by a boundary, the reduction in the size of the subset consists of moving the boundary so as to

remove part of the subset and all the frequency sub-band coefficients situated in the part of the substrate.

11. (Previously Presented) Method according to Claim 3, in which said decision step results in a preservation of the size of the located subset of original samples.

12. (Previously Presented) Method according to Claim 3, further comprising the step of increasing the size of the located subset of original samples which does not change the number of coefficients of the low-frequency sub-band corresponding to the subset.

13. (Previously Presented) Method according to Claim 3, in which, by representing, in a space of dimensions corresponding to the dimensions of the digital signal, a position of the coefficients of the frequency sub-bands obtained by decomposition of the set of original samples and a position of the subset of original samples delimited by a boundary, said method further comprising a step of adding to this subset at least one coefficient of a frequency sub-band other than the low sub-band per dimension of the digital signal, the at least one added coefficient being situated close to the boundary before the movement thereof.

14. (Previously Presented) Method according to Claim 3, in which the set of original samples of the digital signal is separated into several zones T_1, ..., T_{15} which have each independently undergone a decomposition into frequency sub-bands according

to at least one decomposition level and said determining step further comprises determining, for each zone, amongst the coefficients of the low-frequency sub-band of the last decomposition level obtained by decomposition into frequency sub-bands of the zone in question, the number of coefficients of this sub-band per dimension of the signal which correspond to the located subset.

15. (Previously Presented) Method according to Claim 3, in which the coded digital signal includes blocks of samples which have been coded independently.

16. (Previously Presented) Method of decoding a coded digital signal which has been processed by a method of processing a coded digital signal including a set of samples obtained by coding a set of original samples representing physical quantities and a set of information relating to a size w, h of the set of original samples and its resolution res, in which said processing method steps of:

locating a subset of original samples of given size zulx, zuly, zh, zw and resolution zres in the set of original samples according to the set of information on the size w, h and resolution res of this set;

determining, amongst coefficients of a low-frequency sub-band LL_o of a last decomposition level obtained by decomposition into frequency sub-bands of the set of original samples, a number of coefficients per dimension of the signal which correspond or not to the located subset; and

deciding whether or not to modify the size of the located subset

according to the determined number of low-frequency sub-band coefficients, before decoding, and

said decoding method comprises the steps of:

extracting the samples from the coded digital signal corresponding to the located subset of original samples having a size which has possibly been modified;

entropic decoding of these samples;

dequantization of the previously decoded samples;

reverse transformation of the decomposition into frequency sub-bands on the previously dequantized samples; and

restoration of the located subset of samples.

17. (Currently Amended) Method according to Claim 16, in which said extraction step includes extracting from the digital signal [[the]] sample blocks ~~of samples~~ corresponding to the located subset of original samples having a size which has possibly been modified.

18. (Previously Presented) Method according to Claim 16, in which the digital signal is an image signal, the samples of the image being arranged to constitute the rows and columns of the image.

19. (Previously Presented) (Previously Presented) Device for processing a coded digital signal having a set of samples of different types obtained by coding of a set of

original samples representing physical quantities and a set of information representing original samples and parameters used during the coding, comprising:

means for determining a subset of samples corresponding to a selected part of the original digital signal using the set of information;

means for obtaining the number of samples of at least one predetermined type and which are contained in the determined subset of samples;

means for deciding whether or not to modify the determined subset of samples, according to the obtained number of samples of the at least one predetermined type; and

means for restoring the selected part of the original signal, said means of deciding being adapted to make a decision with regard to a modification of the determined subset of samples before said means of restoring restore the selected part of the original signal.

20. (Previously Presented) Device for processing a coded digital signal including a set of samples obtained by coding a set of original samples representing physical quantities and a set of information concerning a size w, h of the set of original samples and its resolution res, comprising:

means for locating a subset of original samples of given size zulx, zuly, zh, zw and resolution zres in the set of original samples according to the set of information of size w, h and resolution res of this set;

means for determining, amongst coefficients of a low-frequency sub-band LL_0 of a last decomposition level obtained by decomposition into frequency

sub-bands of the set of original samples, a number of coefficients per dimension of the signal which correspond to the located subset;

means for deciding whether or not to modify the size of the located subset according to the determined number of low-frequency sub-band coefficients; and

means for restoring the located subset. said means for deciding being adapted to make a decision with regard to a modification of the size of the located subset before said means for restoring restore the located subset.

21. (Previously Presented) Device according to Claim 20, in which said decision means take into account at least one predetermined criterion representing a level of quality required for the restoration of the subset of original samples of the digital signal.

22. (Previously Presented) Device according to Claim 20, in which said means for deciding take into account at least one predetermined criterion representing a compromise between a level of quality required for the restoration of the subset of original samples and a speed of processing for restoring the subset of original samples.

23. (Previously Presented) Device according to Claim 20, further comprising means for modifying the size of the located subset of original samples.

24. (Previously Presented) Device according to Claim 23, wherein said means for modifying comprise means of increasing the size of the subset of original samples.

25. (Previously Presented) Device according to Claim 23, in which said means for modifying comprise means of reducing the size of the subset.

26. (Previously Presented) Device according to Claim 20, wherein said means for deciding lead to a preservation of the size of the located subset of original samples.

27. (Previously Presented) Device according to Claim 20, further comprising means of increasing the size of the located subset of original samples which do not modify the number of coefficients of the low-frequency sub-band corresponding to the subset.

28. (Previously Presented) Device according to Claim 20, wherein the set of original samples of the digital signal is separated into several zones T_1, ..., T_{15} which have each independently undergone a decomposition into frequency sub-bands according to at least one decomposition level and the means for determining determine, for each zone, amongst the coefficients of the low-frequency sub-band of the last decomposition level obtained by decomposition into frequency sub-bands of the zone in question, the number of coefficients of this sub-band per dimension of the signal which correspond to the located subset.

29. (Previously Presented) Device according to Claim 20, wherein the coded digital signal includes blocks of samples which have been coded independently.

30. (Currently Amended) Device for decoding a coded digital signal, which has been processed by a device for processing a coded digital signal including a set of samples obtained by coding a set of original samples representing physical quantities and a set of information concerning a size w, h of the set of original samples and its resolution res, wherein said device for processing ~~device~~ comprises:

means for locating a subset of original samples of given size zulx, zuly, zh, zw and resolution zres in the set of original samples according to the set of information of size w, h and resolution res of this set;

means for determining, amongst coefficients of a low-frequency sub-band LL_0 of a last decomposition level obtained by decomposition into frequency sub-bands of the set of original samples, a number of coefficients per dimension of the signal which correspond to the located subset;

means for deciding whether or not to modify the size of this located subset according to the determined number of low-frequency sub-band coefficients, said means for deciding being adapted to make a decision with regard to a modification of the size of the located subset before said decoding device operates, and

said decoding device comprises:

means for extracting samples from the coded digital signal corresponding to the located subset of original samples having a size which has possibly been modified;

means for entropic decoding of these samples;

means of dequantization of the previously decoded samples;

means of reverse transformation of the decomposition into frequency sub-bands on the previously dequantized samples; and

means of restoration of the located subset of samples.

31. (Currently Amended) Device according to Claim 30, wherein said means for extracting extract from the digital signal [[the]] sample blocks ~~of samples~~ corresponding to the located subset of original samples having a size which has possibly been modified.

32. (Previously Presented) Device according to Claim 20, adapted to process a digital signal which is an image signal, the samples of the image being arranged to constitute the rows and columns of the image.

33. (Previously Presented) Device according to Claim 19, wherein said means for determining, said means for obtaining, and said means for deciding, are incorporated in:

a microprocessor,

a read only memory containing a program for processing the coded digital signal, and

a random access memory containing registers adapted to record variables modified during the execution of said program.

34. (Previously Presented) Device according to Claim 20, wherein said means for locating, said means for determining, and said means for deciding are incorporated in:

a microprocessor,

a read only memory containing a program for processing the coded digital signal, and

a random access memory containing registers adapted to record variables modified during the execution of said program.

35. (Previously Presented) Device according to claim 30, wherein said extracting, entropic decoding, dequantization, reverse transformation, and restoration means are incorporated in:

a microprocessor,

a read only memory containing a program for decoding the coded digital signal, and

a random access memory containing registers adapted to record variables modified during the execution of said program.

36. (Currently Amended) Means for storing information which can be read by a computer or a microprocessor storing instructions of a computer program ~~making it possible to implement~~ implementing the processing method according to claim 3.

37. (Currently Amended) Means for storing information which can be read by a computer or a microprocessor storing instructions of a computer program ~~making it possible to implement~~ implementing the decoding method according to claim 16.

38. (Currently Amended) Information storage means which is removable, partially or totally, and which can be read by a computer or microprocessor storing instructions of a computer program ~~making it possible to implement~~ implementing the processing method according to claim 3.

39. (Currently Amended) Information storage means which is removable, partially or totally, and which can be read by a computer or microprocessor storing instructions of a computer program ~~making it possible to implement~~ implementing the decoding method according to claim 16.

40. (Original) A computer program which can be directly loaded into a programmable device, containing instructions or portions of code for implementing the steps of the processing method according to claim 3, when said computer program is executed on a programmable device.

41. (Original) A computer program which can be directly loaded into a programmable device, containing instructions or portions of code for implementing the steps of the decoding method according to claim 16, when said computer program is executed on a programmable device.